

CURRICULUM GUIDE

3+2 Cyber Systems Technology (Network Security and Electronics Concentration), B.S. 3+2 CST (NET) and Applied Engineering and Technology Management (Network Security Management Concentration), M.S. 2022-2023

Website: www.csit.eku.edu

Email Contact: kuangnan.chang@eku.edu

Department of Computer Science and Information Technology (CSIT)

521 Lancaster Ave.

417 Wallace Bldg.

Richmond, KY 40475

859-622-2398

3+2 CST (NET) Program Coordinator: vigs.chandra@eku.edu

The schedule below is an **EXAMPLE** of how you can arrange your class schedule. Please consult your advisor for specific changes that may need to be made.

	Fall Semester	Spring Semester
Freshman Year	SCO 100 1 EET 252 3 TEC 161 <i>or</i> INF 104 3 EET 251 3 ^o MAT 112A <i>and</i> 112B (or higher, such as MAT 114 or 120) (fulfills Gen. Ed. 2) 3 Gen. Ed. 1A (ENG 101) 3 TOTAL 16	NET 302 3 NET 303 3 EET 257 3 † Concentration Elective 3 Gen. Ed 1B (ENG 102) 3 TOTAL 15
Sophomore Year	AEM 352, EET 253, EET 351, <i>or</i> NET 440 3 NET 354 3 NET 395 3 † Concentration Elective 3 Gen. Ed. 1C (Comm.) 3 TOTAL 15	^o ECO 120 (or higher) (fulfills Gen. Ed. 5B) 3 NET 343 3 NET 349 1 STA 215 <i>or</i> 270 3-4 ^o PHY 101 (or higher) (fulfills Gen. Ed. 4) 3-4 Gen. Ed. 3B (Humanities) 3 TOTAL 16-17
Junior Year	AEM 202 3 NET 344 3 NET 395 3 † Concentration Elective 3 Free Elective (Co-op recommended) 3 TOTAL 15	AEM 310W 3 NET 403 3 Gen. Ed. 3A (Arts) 3 Gen. Ed. 4 (Nat. Sci.) 3 Free Elective (Co-op recommended) 3 TOTAL 15
Senior Year	AEM 804 3 NET 454 3 NSM 815 3 Gen. Ed. 5A (History) 3 Gen. Ed. 6 (Diversity) 3 TOTAL 15	AEM 408 3 NET 499 (ACCT) 3 NET 467 0 NSM 845 3 Gen. Ed. 6 (Diversity) 3 Free Elective (Co-op recommended) 0-1 TOTAL 12-13
Senior +1 Year	AEM 801 3 NSM 895 3 TEC 830 3 TEC 860 3 TOTAL 12	AEM 821 <i>or</i> 839 3 MS Supporting Course Requirement 3 MS Supporting Course Requirement 3 TOTAL 9
TOTAL HOURS TO DEGREE COMPLETION		141

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100	Student Success Seminar (1)
CORE COURSE REQUIREMENTS (43)	
AEM 202	Introduction to Quality (3)
AEM 310W	Technical Communication (3) (writing intensive)
AEM 408	Human Resource Development (3)
AEM 804	Project Management (3)
EET 252	Digital Electronics (3)
NET 302	PC Troubleshooting and Construction (3)
NET 303	LANs and PC Communications (3)
NET 343	Network Switches and Routers (3)
NET 349	Applied Learning in NET (1)
NET 354	Microcomputer and Network Security (3)
NET 395	Special Topics in NET (3)
NET 403	Advanced LANs and PC Communication (3)
NET 499	Senior Capstone (3) (spring only)
NSM 815	Foundations of Network Security (3)
NSM 845	Advanced Server Security (3)
PROGRAM ELECTIVES (6)	
Select THREE (3) HOURS from:	
AEM 352	Robotics and Automated Systems (3)
EET 253	Microprocessor Contro Systems (3)
EET 351	Programmable Logic Controllers (3)
NET 440	Wired/Wireless Communications (3)
Select THREE (3) HOURS from:	
INF 104	Computer Literacy with Software Applications (3)
TEC 161	Computer Applications in Technology (3)
NETWORK SECURITY AND ELECTRONICS CONCENTRATION REQUIREMENTS (24)	
EET 251	Electricity and Electronics (3)
EET 257	Electronic Devices and Circuits (3)
NET 344	Advanced Network Devices (3)
NET 395	Special Topics in NET (3)
NET 454	Wireless/WAN Security (3)
† PLUS NINE (9) HOURS of CSC/CIS/INF courses (CSC 160 or higher), or (CIS 215 or higher), or (INF 130 or higher) (concentration electives)	
SUPPORTING COURSE REQUIREMENTS (3-4)	
^o ECO 120	Economic Reasoning and Issues (3)
^o MAT 112A <i>and</i>	Algebra: Polynomials (1.5)
^o MAT 112B	Algebra: Functions and Matrices (1.5)
^o PHY 101	Conceptual Physics (3)
STA 215 <i>or</i>	Introduction to Statistical Reasoning (3)
STA 270	Applied Statistics (4)
EXIT REQUIREMENT (0)	
NET 467	Exit Exam for BS in NET (0)
FREE ELECTIVES (6-7)	
Co-operative education, NET 349, recommended as free electives or NET 395 (Special Topics in NET) taken with a unique topic.	
M.S. TECHNOLOGY MANAGEMENT (CYBERSYSTEMS TECH SECURITY CONCENTRATION) REQUIREMENTS (30)	
CORE COURSE REQUIREMENTS (15) (Three (3) credits from AEM 804 are counted in the undergraduate program and graduate program)	
AEM 801	Economics for Lean Operations (3)
AEM 804	Project Management (3)
TEC 830	Creative Problem Solving (3)
PLUS SIX (6) HOURS of synthesis experience:	
TEC 860 <i>and</i>	Research in Technology (3)
AEM 821 <i>or</i>	Industrial Technology Project (3)
AEM 839	Applied Learning in Tech Management (3)
CYBER SYSTEMS TECH SECURITY CONCENTRATION REQUIREMENTS (9) (Six (6) credits from NSM 815 and NSM 845 are counted in the undergraduate program and graduate program)	
NSM 815	Foundations of Network Security (3)
NSM 845	Advanced Server Security (3)
NSM 895	Special Topics in NSM: _____ (3)
SUPPORTING COURSE REQUIREMENTS (6)	
Consult with advisor to choose appropriate courses.	
EXIT REQUIREMENT (0)	
GRD 867C <i>or</i>	MS Applied Engineering and Technology Management Written Comprehensive Exam
GRD 868B	MS Applied Engineering and Technology Management Oral Comprehensive Exam

^o Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.